Name: _Sol_

- This quiz consists of **2** questions, each worth 5 points, for a total of **10** points.
- You have **10** minutes to complete the quiz.
- Show all work and justify your answers.
- Scientific calculators are allowed.
- Wishing you success.

① Observation

3 counts of " $\frac{1}{10}$ "   not
7 counts of " $\frac{1}{6}$ "   "same" unit

1. Combine and reduce:

$$\frac{3}{10} - \frac{7}{6}$$

③ answer the question

② Find the "same" unit (Common denominator): 10·3

fact of 10 : 10, 20, 30, 40
fact of 6 : 6, 12, 18, 24, 30.

6·5

$$= \frac{3 \cdot 3}{10 \cdot 3} - \frac{7 \cdot 5}{6 \cdot 5}$$

$$= \frac{9}{30} - \frac{35}{30} = \frac{9 - 35}{30}$$

$$= \boxed{\frac{-26}{30}} \left(= -\frac{2 \times 13}{2 \times 15} = -\frac{2}{2} \times \frac{13}{15} \right.$$

$$\underset{1}{}$$

$$\left. = -\frac{13}{15} \right)$$

2. Evaluate

$$\frac{-29}{5} \div 3 - \frac{4}{-3}$$

① Observation

- $\frac{-29}{5} = -\frac{29}{5}$

- divided by 3
  $\Rightarrow$ multiply $\frac{1}{3}$

- $-\frac{4}{-3}$ → to the opposite
  $= -\left(-\frac{4}{3}\right) = +\frac{4}{3}$ (to the right)
  to the left

② answer $= -\frac{29}{5} \times \frac{1}{3} + \frac{4}{3}$

$$= -\frac{29 \times 1}{5 \times 3} + \frac{4}{3}$$

$$= -\frac{29 \times 1}{5 \times 3} + \frac{4 \times 5}{3 \times 5}$$

common denominator

$$= -\frac{29}{15} + \frac{20}{15} = \frac{-29 + 20}{15} = \frac{-9}{15}$$

$$\left(= -\frac{3 \times 3}{3 \times 5} = -\boxed{\frac{3}{3}} \times \frac{3}{5} = -\frac{3}{5} \right)$$

"1"